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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/553,909 | 10/21/2005 | Kenzi Nisikawa | P28678 | 1096 |

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| EXAMINER | |
|---|---|
| PAJOOHI, TARA S | |
| ART UNIT | PAPER NUMBER |
| 2886 | |

| NOTIFICATION DATE | DELIVERY MODE |
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| 04/01/2008 | ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/553,909 | NISIKAWA, KENZI | |
| | Examiner | Art Unit | |
| | Tara S. Pajoohi | 2886 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *21 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10/21/2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/27/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Status of the Application*

1. Applicant cooperation is required in correcting any errors of which applicant may become aware in the specification.

Claims 1-11 are pending in this application.

Claims 1, 6, 3, 4, and 8 are rejected under nonstatutory obviousness-type double patenting.

Claim 7 is rejected under 35 U.S.C. 101.

Claims 1-11 are rejected under 35 U.S.C. 103.

### *Response to Amendment*

2. Acknowledgement is made to the preliminary amendment to the claims filed on 2/09/2006.

### *Priority*

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

4. Acknowledgement is made that the information disclosure statement filed on 12/27/2005 has been received and considered by the examiner. If the applicant is aware of any prior art or any other co-pending applications not already of record, he/she is reminded of his/her duty under 37 CFR 1.56 to disclose the same.

### *Drawings*

5. Figure 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

In the instant case, the abstract has more than 150 words.

7. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

8. The disclosure is objected to because of the following informalities: Please delete references to the claim numbers in the "Disclosure of the Invention", more specifically pages 5-9.

Appropriate correction is required.

9. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Objections***

10. **Claim 2** is objected to because of the following informalities: There appears to be a typographical error on line 5. Please delete "of the" in the phrase "polarization component of the of the amplitude equivalent value...". Appropriate correction is required.

***Claim Rejections - 35 USC § 112 Second Paragraph***

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. **Claim 2** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Further the term "being excessively large or excessively small" in claim 2 is a relative term which renders the claim indefinite. The term "excessively large or excessively small" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The applicant fails to specifically disclose what makes the p-polarization component of the amplitude equivalent value of the incident light excessively large/small compared to the s-polarization component. For purposes of examination, excessively large/small will be examined as having a null at one of the detectors.

***Double Patenting***

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. **Claims 1 & 6, 3, 4, and 8** rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4 and 11 respectively, of U.S. Patent No. 7,006,207. Although the conflicting claims are not identical, they are not patentably distinct from each other because even though '207 does not explicitly disclose the limitation of "a second measurer that measures a phase shift equivalent value of the incident light based upon the light emitted from the device under test", '207

does disclose that the light is emitted from the polarization separator, which directly receives light from the device under test and therefore the second measurer measures the light emitted from the device under test and thus meeting the limitation.

15. **Claims 1 & 6, 3, 4, and 8** rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 & 2, 3, 4 and 13 respectively, of U.S. Patent No. 7,126,679 in view of Ono (U.S. Patent # 5,473,457).

16. Although the conflicting claims are not identical, they are not patentably distinct from each other because '679 fails to specifically disclose the limitation of "a second measurer that measures a phase shift equivalent value of the incident light based upon the light emitted from the device under test".

17. Ono discloses an optical receiver for detecting the data from the received signal light from the device under test (8). It would have been obvious to one having ordinary skill in the art to measure the phase shift equivalent value of the incident light as taught by Ono in the method of '679 since Ono teaches that it helps maintain the precision in fabrication by accounting for the transmission delay.

| ***Instant Application*** | ***Patent # 7,006,207*** | ***Patent # 7,126,679*** |
|---|---|---|
| **Claims 1 and 6:**<br>An optical characteristic *(polarization mode dispersion of '207 and '679)* measuring instrument that measures an optical characteristic of a device under test, comprising: | **Claim 1:**<br>A polarization mode dispersion measuring device for measuring polarization mode dispersion of a device under test, said polarization mode dispersion measuring device comprising: | **Claim 1:**<br>A polarization mode dispersion measuring device for measuring polarization mode dispersion of an device under test comprising: |
| a polarization separator that receives light emitted from the device under test, separates the received light into p-polarized light and s-polarized light, and outputs the p-polarized light and s-polarized light; *(same limitation in both '207 and '679)* | polarization separating means for receiving light having emitted from the device under test, separating said received light into p-polarized light and s-polarized light, and outputting the p-polarized light and s-polarized light; | a polarization separating means for receiving light having emitted from said device under test, separating said received light into p-polarized light and s-polarized light, and outputting the p-polarized light and s-polarized light; |
| a light generator that generates incident light; *(same limitation in both* | light generating means for generating first incident light and | a light generating means for generating incident light; |

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| *'207 and '679)* | second incident light both having a common wavelength; | |
| an optical modulator that applies intensity modulation to the incident light, and emits modulated light; *(same limitation in both '207 and '679)* | first optical modulation means for applying a first intensity modulation with a first intensity modulation frequency to said first incident light, and emitting first modulated light; second optical modulation means for applying a second intensity modulation with a second intensity modulation frequency different from said first intensity modulation frequency to said second incident light, and emitting second modulated light; polarization combining means for combining said first incident light and said second incident light having been applied with the first and second intensity modulations, and emitting combined incident light; | an optical modulation means for applying said incident light with intensity modulation, and emitting modulated light; |
| a light inputter that makes the incident light which has undergone the intensity modulation incident on the device under test, wherein the incident light is coincident with a p-polarization axis and an s-polarization axis of said polarization separator; *(same limitation in both '207 and '679)* | light input means for making said combined incident light incident to the device under test, wherein said first incident light is in line with a p-polarization axis in said polarization separating means, and said second incident light is in line with an s-polarization axis in said polarization separating means; | a light input means for making said incident light having been applied with the intensity modulation in line with orthogonal polarization axes which are said p-polarization axis and said s-polarization axis in said polarization separating means rotated by a predetermined angle, and then, making the resulting incident light incident to said device under test;<br>**Claim 2:**<br>The polarization mode dispersion measuring device according to claim 1, wherein said light input means for making said incident light in line with said orthogonal polarization axes, further making said incident light in line with said p-polarization axis and said s-polarization |

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| | | axis, and then, making the resulting incident light incident to said device under test. |
| a first measurer that measures a phase shift equivalent value and an amplitude equivalent value of the incident light based upon the output from said polarization separator; | first measuring means for measuring phase shift equivalent values of a component of said first incident light in the output of said polarization separating means; | a measuring means for measuring phase shift equivalent values and amplitude equivalent values of said incident light based on the output of said polarization separating means; and |
| a second measurer that measures a phase shift equivalent value of the incident light based upon the light emitted from the device under test; and *(light output from the polarization separating means includes the light that was output from the device under test as taught in '207) ('679 does not have this limitation)* | second measuring means for measuring phase shift equivalent values of a component of said second incident light in the output of said polarization separating means; and | |
| an optical characteristic measurer that measures the optical characteristic *(polarization mode dispersion of '207 and '679)* of the device under test based upon the measured results by said first measurer and said second measurer. | polarization mode dispersion measuring means for measuring a polarization mode dispersion of the device under test based on measurement results of said first measuring means and said second measuring means. | a polarization mode dispersion measuring means for measuring the polarization mode dispersion of said device under test based on the measurement result of said measuring means. |
| **Claim 3:** The optical characteristic measuring instrument according to claim 1, wherein the phase shift equivalent value is obtained by differentiating a phase shift by an optical angular frequency. *(same limitation in both '207 and '679)* | **Claim 2:** The polarization mode dispersion measuring device according to claim 1, wherein said phase shift equivalent value is obtained by differentiating a phase shift by an optical angular frequency. | Claim 3: The polarization mode dispersion measuring device according to claim 2, wherein said phase shift equivalent value is obtained by differentiating a phase shift by an optical angular frequency. |
| **Claim 4:** The optical characteristic measuring instrument according to claim 1, wherein the amplitude equivalent value is the square of an amplitude. *(same limitation in both '207 and '679)* | **Claim 4**: The polarization mode dispersion measuring device according to claim 3, wherein said amplitude equivalent value is the square of an amplitude. | **Claim 4:** The polarization mode dispersion measuring device according to claim 2, wherein said amplitude equivalent value is the square of an amplitude. |
| **Claim 8:** A computer-readable medium having a program of instructions for execution by a computer to perform | **Claim 11:** A computer-readable medium having a program of instructions for execution by a computer to perform | **Claim 13:** A computer-readable medium having a program of instructions for execution by |

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| an optical characteristic measuring process of an optical characteristic measuring instrument that measures an optical characteristic of a device under test, comprising: *(same limitation in both '207 and '679)* | a process for measuring polarization mode dispersion of a device under test by a polarization mode dispersion measuring device having: | the computer to perform a polarization mode dispersion measuring process of a polarization mode dispersion measuring device having: |
| a polarization separator that receives light emitted from the device under test, separates the received light into p-polarized light and s-polarized light, and outputs the p-polarized light and s-polarized light; *(same limitation in both '207 and '679)* | polarization separating means for receiving light having emitted from the device under test, separating said received light into p-polarized light and s-polarized light, and outputting the p-polarized light and s-polarized light; | a polarization separating means for receiving light having emitted from said device under test, separating said received light into p-polarized light and s-polarized light, and outputting the p-polarized light and s-polarized light; |
| a light generator that generates incident light; *(same limitation in both '207 and '679)* | light generating means for generating first incident light and second incident light both having a common wavelength; | a light generating means for generating incident light; |
| an optical modulator that applies intensity modulation to the incident light, and emits modulated light; and *(same limitation in both '207 and '679)* | first optical modulation means for applying a first intensity modulation with a first intensity modulation frequency to said first incident light, and emitting first modulated light; second optical modulation means for applying a second intensity modulation with a second intensity modulation frequency different from said first intensity modulation frequency to said second incident light, and emitting second modulated light; | an optical modulation means for applying said incident light with intensity modulation, and emitting modulated light; |
| a light inputter that makes the incident light which has undergone the intensity modulation incident on the device under test wherein the incident light is coincident with a p-polarization axis and an s-polarization axis of said polarization separator; said optical characteristic measuring process comprising: *(same* | polarization combining means for combining said first incident light and said second incident light having been applied with the first and second intensity modulations, and emitting combined incident light; light input means for making said combined incident light incident to the device under test, wherein said | a light input means for making said incident light having been applied with the intensity modulation in line with orthogonal polarization axes which are said p-polarization axis and said s-polarization axis in said polarization separating means rotated by a |

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| *limitation in both '207 and '679)* | first incident light is in line with a p-polarization axis in said polarization separating means, and said second incident light is in line with an s-polarization axis in said polarization separating means; | predetermined angle, and then, making the resulting incident light incident to said device under test, said polarization mode dispersion measuring process comprising: |
| measuring a phase shift equivalent value and an amplitude equivalent value of the incident light based upon the output from said polarization separator; *(same limitation in both '207 and '679)* | first measuring means for measuring phase shift equivalent values of a component of said first incident light in the output of said polarization separating means; and | a measuring step for measuring phase shift equivalent values and amplitude equivalent values of said incident light based on the output of said polarization separating step; and |
| measuring a phase shift equivalent value of the incident light based upon the light emitted from the device under test; and *(light output from the polarization separating means includes the light that was output from the device under test as taught in '207) ('679 does not have this limitation)* | second measuring means for measuring phase shift equivalent values of a component of said second incident light in the output of said polarization separating means; said process comprising: | |
| measuring the optical characteristic *(polarization mode dispersion of '207 and '679)* of the device under test based upon the measured phase shift equivalent value and amplitude equivalent value of the incident light based output from said polarization separator, and the measured phase shift equivalent value of the incident light based upon the light emitted from the device under test. | a polarization mode dispersion measuring step comprising measuring a polarization mode dispersion of the device under test based on measurement results of said first measuring means and said second measuring means. | a polarization mode dispersion measuring step for measuring the polarization mode dispersion of said device under test based on the measurement result of said measuring step. |

***Claim Rejections - 35 USC § 101***

18. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

19. **Claim 7** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim is directed to "a program of instructions for execution by a computer", which is a

software program, per se, and thus non-statutory subject matter. A program is neither a process, nor a composition of matter, an article of manufacture, nor an apparatus. In contrast, a claimed physical computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory.

***Claim Rejections - 35 USC § 103***

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

21. **Claims 1-11** are rejected under 35 U.S.C. 103(a) as being obvious over **Ozeki et al. (U.S. Patent # 5,717,489)** in view of **Ono (U.S. Patent # 5,473,457).**

22. Considering **claims 1 and 6-8,** Ozeki discloses (abstract and col. 4, line 29 - col. 5, line 38) and shows in figure 1, an optical characteristic measuring instrument that measures an optical characteristic of a device under test (104), comprising:

a. a polarization separator (105) that receives light having emitted from the device under test (104), separates the received light into p-polarized light and s-polarized light, and outputs the p-polarized light and s-polarized light;

b. a light generator (101) that generates incident light;

c. an optical modulator (102) that applies intensity modulation to the incident light, and emits modulated light;

d. a light inputter (103) that makes the incident light which has undergone the intensity modulation incident on the device under test, wherein the incident light is coincident with a p-polarization axis and an s-polarization axis of said polarization separator;

e. a first measurer (107) that measures a phase shift equivalent value and an amplitude equivalent value of the incident light based upon the output from said polarization separator (106)

Ozeki fails to disclose a second measurer that measures a phase shift equivalent value of the incident light based upon the light emitted from the device under test and an optical characteristic measurer that measures the optical characteristic of the device under test based upon the measured results by said first measurer and said second measurer.

In the same field of endeavor, Ono discloses (abstract and col. 3, line 32 - col. 4, line 61) and shows in figure 1, a first (14) and second measurer (12) such that the second measurer measures a phase shift equivalent value (i.e., dispersion) of the incident light based upon the light emitted from the device under test (8) and an optical characteristic measurer (19) that measures the optical characteristic (i.e., dispersion of polarization) of the device under test based upon the measured results by said first measurer and said second measurer.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of a second measurer to measure a phase shift equivalent value of the incident light based upon the light emitted from the device under test as taught by Ono in the method of Ozeki, since the second measurer would allow for a reference phase shift equivalent value for the light emitted from the device under test to compare with that from the first measurer which contains noise and therefore would provide a more accurate analysis of the optical characteristic.

23. Considering **claim 2**, the modified method of Ozeki fails to disclose basing the optical characteristic measurer on the results of the second measurer if a p-polarization component of the amplitude equivalent value of the incident light measured by said first measurer being excessively large or excessively small compared with that of an s-polarization component thereof then there is too much noise and therefore readings are inaccurate.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to base the optical characteristic measurer upon the second or first measure depending upon the results, since

it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). It would have been further obvious in order to reduce the noise and therefore have more accurate measurement of the optical characteristic of the device under test.

24. Considering **claims 3, 4, 9 and 10,** Ozeki when modified by Ono discloses (col. 3-4) obtaining a phase shift, an optical angular frequency and amplitude based on the light emitted from the device under test.

Ozeki fails to specifically disclose differentiating a phase shift by an optical frequency. Ozeki also fails to disclose the amplitude equivalent value is the square of an amplitude.

However, it is well known in the art to differentiate data, more specifically the phase shift by an optical frequency and to determine the square of data, such as an amplitude in order to determine an optical characteristic of a device under test. It would have been further obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that manipulating equations would involve only routine skill in the art. It would have been further obvious in order to provide an easily replicated mathematical representation for the optical characteristic of the device under test.

25. Considering **claims 5 and 11,** Ozeki fails to disclose a group delay time measurer measures a group delay time of the device under test based upon the measured result by said second measurer.

Ono discloses measuring a transmission delay of the device under test.

It would have been obvious to one having ordinary skill in the art to measure a delay time of the device under test in order to avoid the deterioration of a received signal and therefore limit the penalty in an optical communication system.

***Conclusion***

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara S. Pajoohi whose telephone number is (571)272-9785. The examiner can normally be reached on Monday - Thursday 9:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur R. Chowdhury can be reached on 571-272-2287. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tara S. Pajoohi
Patent Examiner

TSP

/TARIFUR R CHOWDHURY/

Supervisory Patent Examiner, Art Unit 2886